

	Application No.	Applicant(s)
Notice of Allowability	10/603,931	JANG ET AL.
	Examiner	Art Unit
	Tarifur R. Chowdhury	2871
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHT of the Office or upon petition by the applicant. See 37 CFR 1.313 1. This communication is responsive to amendment filed on Co. 2. The allowed claim(s) is/are 1-19 and 32-50. 3. Acknowledgment is made of a claim for foreign priority una) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have	ears on the cover sheet with the (OR REMAINS) CLOSED in this a or other appropriate communication of the application is subject and MPEP 1308. 25/22/06. der 35 U.S.C. § 119(a)-(d) or (f). been received.	correspondence address application. If not included on will be mailed in due course. THIS t to withdrawal from issue at the initiative
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.		
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached		
1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).		
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.		
Attachment(s) 1. ☑ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. ☐ Interview Summa Paper No./Mail D 8), 7. ☑ Examiner's Amen	Date

Application/Control Number: 10/603,931 Page 2

Art Unit: 2871

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application is in condition for allowance except for the presence of claims 20-31 directed to an invention non-elected without traverse in the reply filed on September 17, 2004.

Accordingly, claims 20-31 have been canceled.

Application/Control Number: 10/603,931 Page 3

Art Unit: 2871

Allowable Subject Matter

2. Claims 1-19 and 32-50 are allowed.

- 3. The following is an examiner's statement of reasons for allowance:
- 4. The prior arts of record do not anticipate or render obvious to one of ordinary skill in the art a liquid crystal display device comprising various elements as claimed, more specifically each of the gate lines having a first set of protrusions and depressions extending in a direction substantially perpendicular to a surface of the substrate on which the gate lines are arranged and a metal layer overlapping each of the gate lines to create a storage capacitor, the metal layer having at least one set of protrusions and depressions extending in a direction substantially perpendicular to a surface on which the metal layer is formed, is considered novel.
- 5. The newly cited reference USPAT 6,900,852 is related to a liquid crystal display device wherein the storage capacitor line (118) has independent electrode (107) protruding from the capacitor line (Fig. 3). However, all of the prior arts alone or in combination with any other prior art references fail to teach or suggest the claimed invention.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance." Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tarifur R. Chowdhury

Application/Control Number: 10/603,931 Page 4

Art Unit: 2871

whose telephone number is (571) 272-2287. The examiner can normally be reached on M-Th (6:30-5:00) Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nelms C. David can be reached on (571) 272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TRC August 14, 2006

TARIFUR R. CHOWDHURY
PRIMARY EXAMINER